

CLAIMS:

1 1. A method of communicating between a wireless unit and a packet data
2 network, said method comprising:

3 sending a setup packet over a circuit switched link between said wireless unit
4 and a base station to establish a data session between said wireless unit and said
5 packet data network; and

6 using a packet switched link between said wireless unit and said base station
7 for said data session.

1 2. The method of claim 1 including :
2 establishing said circuit switched link between said wireless unit and said base
3 station.

1 3. The method of claim 1 wherein sending includes:
2 using an established circuit switched link between said wireless unit and said
3 base station.

1 4. The method of claim 3 further including:
2 multiplexing said setup packet with a traffic frame over said circuit switched
3 link.

1 5. The method of claim 4 wherein said step of multiplexing including the
2 step of:
3 multiplexing said setup packet with a voice frame over a circuit switched link.

1 6. The method of claim 5 including the step of:
2 maintaining said circuit switched link for at least the duration of a voice call
3 on said circuit switched link.

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1 7. The method of claim 2 including the step of:
2 maintaining said circuit switched link for at least the duration of a link layer
3 connection under said data session.

1 8. The method of claim 1 wherein said step of using including the step of:
2 making a request for resources to send data packets for said data session;
3 temporarily allocating a wireless resource in response to said request; and
4 sending data packets for said data session on said wireless resource.

1 9. The method of claim 8 wherein said step of being and sending further
2 including the step of:
3 using temporary assignments of supplemental channels as said wireless
4 resource for sending said data packets for said data session.

1 10. The method of claim 8 wherein said step of sending further including
2 the step of:
3 sending data packets for said data session on a reverse circuit switched link
4 from said wireless unit to a base station.

1 11. The method of claim 8 wherein said step of sending further including
2 the step of:
3 sending data packets for said data session on a forward circuit switched link
4 from a base station to said wireless unit.

1 12. The method of claim 1 wherein said sending including:
2 sending by said wireless unit a setup packet over said circuit switched link
3 between said wireless unit and said base station to establish said data session between
4 said wireless unit and said packet data network.

1 13. The method of claim 1 wherein said sending including:
2 sending by said base station a setup packet over said circuit switched link
3 between said wireless unit and said base station to establish said data session between
4 said wireless unit and said packet data network.